WHAT IS CLAIMED IS:

1. A watercraft comprising a hull, a propulsion unit supported relative to the hull, a steering system configured to influence a direction of travel of the watercraft, the steering system comprising an operator steering control configured to rotate a steering shaft between a first maximum turning position and a second maximum turning position to permit an operator of the watercraft to control a position of the steering system, a force detection assembly configured to sense a force further applied to the operator steering control after the operator steering control is turned to either of the first and second maximum turning positions, and a control system configured to increase an output of the propulsion unit when the force further applied to the operator steering control exceeds a predetermined threshold.

2. The watercraft of Claim 1, wherein the control system is configured to increase an output of the propulsion unit in proportion to a magnitude of the force further applied to the operator steering control.

3. The watercraft of Claim 1, wherein the operator steering control is a handlebar assembly and the propulsion unit is a water jet propulsion unit, the water jet propulsion unit comprising a steering nozzle adapted to be turned along with turning of the handlebar assembly.

4. The watercraft of Claim 3, additionally comprising a pair of deflectors supported by the steering nozzle for pivotal motion about a generally vertical axis and straddling a flow of water issuing from the steering nozzle in a neutral position, wherein the control system is configured to rotate the pair of deflectors relative to the steering nozzle to divert a flow of water issuing from the steering nozzle in relation to the magnitude of the force.

5. The watercraft of Claim 1, wherein the steering system comprises a fixed stop and a moveable stop, the movable stop fixed for movement with the steering shaft, the fixed stop and the movable stop contact one another to define the first and second maximum turning positions, and wherein the force detection assembly comprises a first load receiving element and a second load receiving element associated with one of the fixed and movable stops, and at least one sensor, the first load receiving element configured to receive a compressive load when force is further applied to the operator steering control after the operator steering control is turned to the first maximum turning position, the second load

receiving element configured to receive a compressive load when force is further applied to the operator steering control after the operator steering control is turned to the second maximum turning position, the at least one sensor configured to produce an output signal corresponding to a load applied to either of the first and second load receiving elements.

6. The watercraft of Claim 5, wherein the force detection assembly is a magnetostrictive detection system, the at least one sensor configured to detect a change in a magnetic permeability of either of the first and second load receiving elements.

7. The watercraft of Claim 5, wherein the first and second load receiving elements are constructed from a conductive rubber material and the at least one sensor is configured to detect a change in an electrical resistance of either of the first and second load receiving elements.

8. The watercraft of Claim 5, wherein the movable stop comprises a first stop surface and a second stop surface and the first and second load receiving elements are supported within an integral housing, wherein the housing defines, at least in part, the fixed stop.

9. The watercraft of Claim 8, wherein axes of the first and second load receiving elements are arranged to form a V-shape when viewed along an axis of the steering shaft, the first stop surface and the second stop surface move along an imaginary circle centered about the axis of the steering shaft, and wherein the axes of the first and second load receiving elements are tangential to the imaginary circle.

10. The watercraft of Claim 8, wherein the integral housing is constructed of a non-magnetic material.

11. The watercraft of Claim 8, wherein the first load receiving element, the second load receiving element and the at least one sensor are sealed within the housing, with the exception of a contact surface of each of the first and second load receiving elements, by an elastically-deformable synthetic resin material.

12. The watercraft of Claim 11, additionally comprising an electric circuit board electrically connected to the force detection assembly, wherein the electric circuit board is housed within the integral housing.

13. The watercraft of Claim 12, wherein the electric circuit board is sealed within the integral housing by a shock absorbing material.

14. The watercraft of Claim 1, wherein the steering system additionally comprises a linkage assembly configured to define the first and second maximum turning positions, the linkage assembly including a first end movable with the steering shaft and a second end fixed with respect to the hull, the force detection assembly including at least one sensor configured to produce an output signal corresponding with a tension of the linkage assembly.

15. The watercraft of Claim 14, wherein the force detection assembly is of a magnetostrictive type, wherein a linkage member of the linkage assembly is constructed of a material that changes in magnetic permeability in response to a change in a tensile load applied to the material, and the at least one sensor is configured to produce an output signal corresponding to a magnetic permeability of the linkage member.

16. The watercraft of Claim 1, wherein the steering system additionally comprises a linkage assembly configured to define the first and second maximum turning positions, the linkage assembly including a first end movable with the steering shaft and a second end fixed with respect to the hull, the force detection assembly including at least one load receiving element and at least one sensor, the linkage assembly configured to apply a compressive force to the at least one load receiving element, wherein a magnitude of the compressive force is reduced when force is further applied to the operator steering control after the operator steering control has been turned to either of the first and second maximum turning positions, and wherein the at least one sensor is configured to produce an output signal corresponding with a compressive force applied to the at least one load receiving element.

17. The watercraft of Claim 1, wherein the force detection assembly comprises a load receiving element and at least one sensor, the load receiving element configured to be rotated with the steering shaft about an axis of the steering shaft and to receive a torsional load when force is further applied to the operator steering control after the operator steering control is turned to either of the first and second maximum turning positions, the at least one sensor configured to produce an output signal corresponding with a torsional load applied to the at least one load receiving element.

18. A watercraft comprising a hull, a water jet propulsion unit supported relative to the hull and including a steering nozzle, a steering system configured to influence a direction of travel of the watercraft, the steering system comprising an operator steering control movable between a first maximum turning position and a second maximum turning

position and configured to permit an operator of the watercraft to control a position of the steering nozzle, a force detection assembly configured to sense a force further applied to the operator steering control after the operator steering control is turned to either of the first and second maximum turning positions, a pair of deflectors supported by the steering nozzle for pivotal motion about a generally vertical axis and straddling a flow of water issuing from the steering nozzle in a neutral position, and a control system configured to rotate the pair of deflectors relative to the steering nozzle to divert a flow of water issuing from the steering nozzle when the force further applied to the operator steering control exceeds a predetermined threshold.

19. The watercraft of Claim 18, wherein the control system is configured to rotate the pair of deflectors through an angle proportional to a magnitude of the force further applied to the operator steering control.

20. A watercraft comprising a hull, a propulsion unit supported relative to the hull, a steering system configured to influence a direction of travel of the watercraft, the steering system comprising an operator steering control movable between a first maximum turning position and a second maximum turning position and configured to permit an operator of the watercraft to control a position of the steering system, a force detection assembly configured to sense a force further applied to the operator steering control after the operator steering control is turned to either of the first and second maximum turning positions, at least one rudder supported by the propulsion unit for pivotal motion about a generally horizontal axis from a first position not providing a substantial steering force to a second position configured to provide a steering force with a body of water on which the watercraft is operated, and a control system configured to rotate the at least one rudder toward the second position when the force further applied to the operator steering control exceeds a predetermined threshold.

21. The watercraft of Claim 20, wherein the control system is configured to rotate the at least one rudder through an angle proportional to a magnitude of the force further applied to the operator steering control

22. The watercraft of Claim 20, wherein the operator steering control is a handlebar assembly and the propulsion unit is a water jet propulsion unit, the water jet

propulsion unit comprising a steering nozzle adapted to be turned along with turning of the handlebar assembly.

23. The watercraft of Claim 22, wherein the at least one rudder comprises a pair of rudders straddling a flow of water issuing from the steering nozzle.

24. A steering assist method for a watercraft comprising determining a force further applied to an operator steering control after the operator steering control is turned to a maximum turning position, and increasing a steering force of the watercraft when the force further applied to the operator steering control exceeding a predetermined threshold.

25. The method of Claim 24, wherein the steering force is increased in proportion to a magnitude of the force.

26. The method of Claim 24, wherein the step of increasing a steering force involves increasing an output of a propulsion unit of the watercraft.

27. The method of Claim 24, wherein the step of increasing a steering force involves diverting a flow of water issuing from a steering nozzle of a water jet propulsion unit of the watercraft.

28. The method of Claim 24, wherein the step of increasing a steering force involves lowering at least one rudder into a position to contact a body of water in which the watercraft is operating.

29. A watercraft comprising a hull, a propulsion unit supported relative to the hull, a steering system configured to influence a direction of travel of the watercraft, the steering system comprising an operator steering control configured to rotate a steering shaft, a control system configured to increase an output of the propulsion unit when the steering system is rotated beyond a predetermined position, and means for providing a tactile signal to a rider of the watercraft corresponding to the predetermined position.

30. The watercraft according to Claim 29 additionally comprising means for controlling a thrust output of the propulsion unit based on a force applied to the steering mechanism after the steering mechanism has been rotated to the predetermined position.